BIAMP®

MXA Series
Mixer/Amplifiers

Operation Manual

IMPORTANT SAFETY INFORMATION

Read these instructions.

Keep these instructions.

Heed all warnings.

Follow all instructions.

Do not use this apparatus near water.

Clean only with a dry cloth.

Only use attachments / accessories specified by manufacturer.

Install in accordance with the manufacturers instructions.

WARNING - To reduce the risk of electric shock, do not expose this apparatus to rain or moisture.

Apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the apparatus.

In order to comply with international safety requirements for operating temperature, clearance of at least 5cm or 1.97" must be maintained between this device and other rack-mounted devices. This spacing will ensure that all exposed metal surfaces are safe to touch.

Do not block any of the ventilation openings.

Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

Unplug this apparatus during lightning storms or when unused for long periods of time.

Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. When the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.

Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

Explanation of safety related markings and symbols which appear on the outside of the apparatus.

Lightning Bolt: Hazardous Live voltages present when this unit is in operation. Do not touch terminals marked with this symbol while the unit is connected to live power.

Exclamation Point: Replace components (i.e. fuses) only with the values specified by the manufacturer. Failure to do so will compromise safe operation of this unit.

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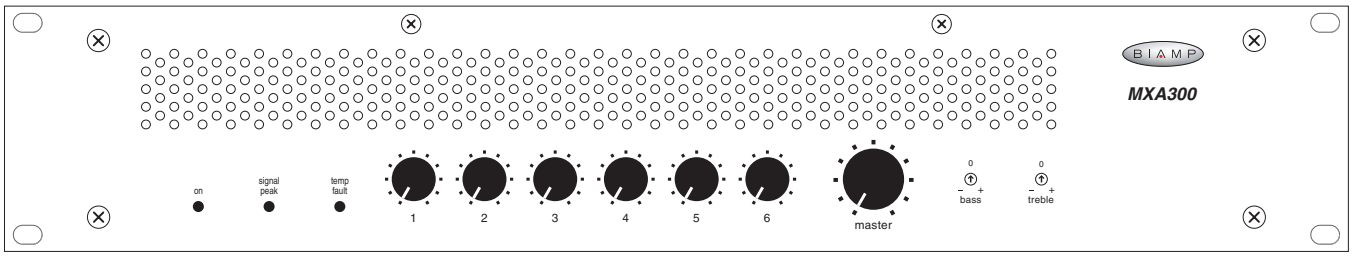
INTRODUCTION

The **MXA Series** of mixer/amplifiers combines a versatile 6-input mic/line mixer with either 35, 75, 150, or 300 Watt amplification. Mixing functions include mic/line/tel inputs, selectable automatic & manual channel muting, channel priority assignment, remote level control, tone control, a built-in limiter, an internal chime, phantom power, MOH output, and extensive patching. The amplifier includes an output transformer, and provides rated power into direct or distributed speaker systems. The MXA Series carries a five-year warranty.

MXA Series features include:

- integrated mixer, power amplifier, and output transformer
- six electronically balanced microphone/line input channels
- channel 1 selectable for 600 ohm transformer tel input
- rear panel trim, pad, & peak indicator on each input channel
- +48 Volt phantom power selectable on each input channel
- automatic muting of selected channels (-20dB or -80dB)
- automatic muting triggered by selected priority channels
- manual muting of selected channels (-20dB or -80dB)
- manual muting triggered from remote contact closures
- remote control of master level via rear panel terminals
- integral output limiter with rear panel threshold control
- recessed tone controls plus rear panel low-cut filter switch
- patch points for signal processing and systems interconnect
- Music On Hold output with independent level, from input 6
- 35, 75, 150, or 300 watts into direct or distributed systems
- front panel indicators for power, signal, peak, temp, & fault
- internal pre-announcement chime tone with level control
- input/output connections provided on barrier strip terminals
- covered by Biamp Systems' five-year warranty
- CE marked and **CSA** tested to UL 60065

FRONT & REAR PANEL FEATURES



On Indicator: This green LED remains lit when AC power is applied to the unit.

Signal/Clip Indicator: This 2-color LED indicates the signal level for the amplifier. When the LED is green, the amplifier has signal (above -30dB). When the LED is red, the amplifier signal is clipping (max. power). ***CAUTION:*** *Signal levels should be adjusted to avoid clipping. Clipping can cause distortion, over-temperature conditions, and even loudspeaker damage.*

Temp/Fault Indicator (not present on model MXA35)**:** This red LED indicates over-temperature and output fault conditions for the amplifier. When the LED remains lit, the amplifier has an over-temperature condition. When the LED is flashing, the amplifier has an output fault condition. Either condition will temporarily de-activate the amplifier, causing the Signal/Peak LED to turn off as well. The amplifier will attempt to self-reset once the over-temperature or output fault condition is resolved.

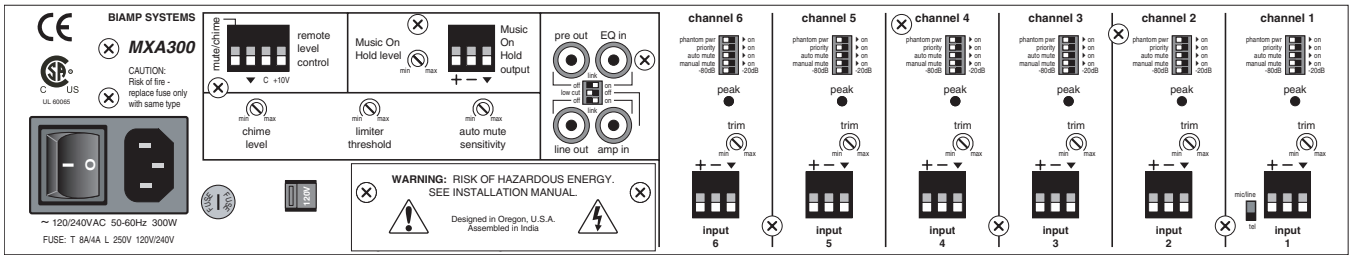
NOTE: *Signal/Peak indicators will turn off during Temp/Fault conditions (see Signal/Peak & Temp/Fault Indicators above).*

Level (Channels 1~6): These controls adjust the amount of signal sent from the individual input channels to the mixer output. Optimum Level setting is near the 12 o'clock position (unity gain).

Level (Master): This control adjusts the amount of signal sent from the mixer output to the amplifier input. The Master Level control is used to adjust the overall volume of the system.

Bass: This screwdriver control adjusts the low-frequencies ("Bass") at the mixer output (±12dB @ 50Hz).

Treble: This screwdriver control adjusts the high-frequencies ("Treble") at the mixer output (±12dB @ 10kHz).



AC Power Entrance: The switch applies power to the unit. The receptacle accepts the detachable Power Cord. The Power Cord is for connection to three-prong grounded outlets. ***CAUTION:*** *Do not remove or defeat the ground prong on the Power Cord, as this constitutes a shock hazard. Equipment shall be connected to a mains socket outlet with a protective earthing connection. Plug is main disconnecting device and it shall remain readily operable.*

Fuse: Replace Fuse with same type and value only. ***NOTE:*** *If the Fuse continues to blow, the amplifier may require service.*

Power Selector Switch: This switch selects either 120 Volt or 240 Volt AC operation.

Output Connector: These screw terminals provide the speaker outputs from the amplifier. **CAUTION:** To reduce the risk of electric shock, do not perform any servicing other than that contained in this Operation Manual unless you are qualified to do so. Output connections must be made by qualified service personnel only (refer to the Installation Manual).

Chime Level: This control adjusts the volume level of a chime tone (see Mute/Chime below). To turn the chime tone off completely, set this control to the counter-clockwise position (min).

Limiter Threshold: This control adjusts the threshold level at which the internal limiter circuit is activated. To turn the limiter off completely, set this control to the clockwise position (max).

Auto Mute Sensitivity: This control adjusts the level at which signals from "priority" channels will automatically trigger muting of selected <u>non-priority</u> channels (see DIP Switches on next page). To increase auto mute sensitivity, turn this control clockwise.

Mute/Chime: This terminal (plus the adjacent ▼ terminal) allows manual muting of selected channels via an external switch or contact closure (see DIP Switches on next page). When the Chime Level control is turned up (on), a pre-announcement chime tone will also be activated by the switch or contact closure.

Remote Level Control: These two terminals (plus the adjacent "▼" terminal) provide remote volume control of the master level. An internal voltage controlled amplifier (VCA) allows remote control from up to 2000 feet away, using any 5k~50kΩ linear taper potentiometer and/or switch to provide adjustment and/or muting of the master level. Potentiometers are wired with high-side to (+10V), low-side to (▼), and wiper to (C). Mute switches simply connect (C) to (▼), with no (+10V) connection required.

Music On Hold Level: This control adjusts the volume level of a Music On Hold output (see below). To turn the output off completely, set this control to the counter-clockwise position (min).

Music On Hold Output: These three terminals provide a balanced line-level output as a source for phone systems. This signal is derived from input channel 6. For unbalanced output, wire high to (+) and ground to (▼), leaving (-) unconnected.

Pre Out & EQ In: These two RCA jacks provide pre-tone patching for external equipment. When used as an 'insert point' for external signal processors, set the associated Link switch to the (off) position. When using Pre Out for recording and/or EQ In for stacking, the Link switch may remain in the (on) position.

Line Out & Amp In: These two RCA jacks provide post-master patching for external equipment. When used as an 'insert point' for external signal processors, set the associated Link switch to the (off) position. When using Line Out for external amps and/or Amp In for stacking, the Link switch may remain in the (on) position.

Low Cut: This switch controls a low-cut filter (12dB/octave @ 125Hz) at the amplifier input. ***CAUTION:*** *To avoid output fault conditions, Low Cut must be used when driving 25/70/100 Volt speaker systems (see Installation Manual). Also, any other system equalization affecting frequencies below 125Hz should remain flat or be used as cut-only. This also precludes boosting of the Bass control (see above) in these applications.*

DIP Switches: The five DIP switches above each input are used to assign specific functions to those individual channels. Phantom Pwr assigns +48 Volts DC phantom power to the channel input, for powering condenser microphones. ***CAUTION:*** *To avoid damage to equipment, assign phantom power only on channels being used as inputs for conderser microphones.* Priority assigns a channel to priority. When signal is present in a priority channel, any non-priority channels which are assigned to Auto Mute will be muted by their selected amounts (see below). ***NOTE:*** *A priority channel cannot be auto muted by another priority channel, but a priority channel can be manually muted (see below).* Auto Mute assigns a (non-priority) channel to be muted whenever signal is present in any priority channel. Manual Mute assigns a channel to be muted whenever the Mute/Chime terminal is shorted to ground via a switch or contact closure. Mute Level assigns the amount of muting (-80dB or -20dB) which is applied to a channel, when triggered by either Auto Mute or Manual Mute. ***NOTE:*** *-80dB is effectively complete muting (off), whereas -20dB is audible attenuation (ducking).*

Peak: These red LEDs will light whenever channel signal levels reach +10dB (8dB below clipping). Use this feature to aid in proper adjustment of Trim (see below).

Trim: These screw-driver controls set the channel gain (0~60dB) to compensate for different input signal levels (mic or line). Adjust these controls so the channel Peak indictors flash only on occasional peaks.

Mic/Line or Tel Switch (Channel 1 only): This switch selects the proper impedance and gain for either mic/line input signals or input from 600 ohm sources. The input for Channel 1 includes an isolation transformer, which allows connection to most telephone system audio ports.

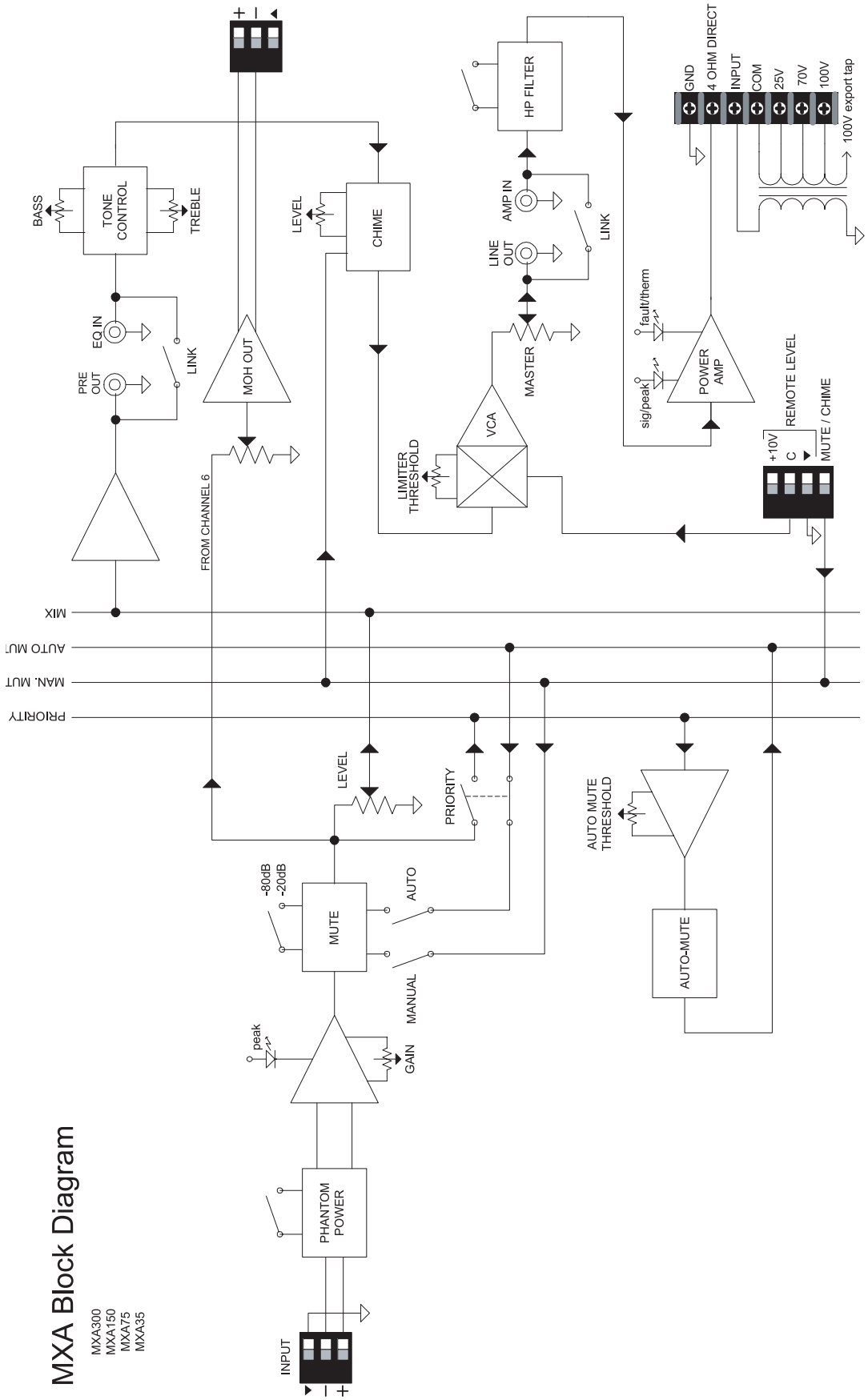
Inputs: These plug-in barrier strips provide a balanced input connection for each channel. For unbalanced input, wire high to (+) and ground to both (-) & (▼). The input for Channel 1 includes an isolation transformer.

MXA SERIES SPECIFICATIONS

Output Power (4 ohm load)**:**	
MXA35	35 watts
MXA75	75 watts
MXA150	150 watts
MXA300	300 watts
Output Transformer Voltages:	25V, 70V, 100V
Frequency Response (+0/-1.5dB)**:**	
4 ohm direct output	20Hz ~ 20kHz
transformer output	50Hz ~ 20kHz
THD+Noise (1kHz @ rated power)**:**	< 0.2%
Equivalent Input Noise (150 ohm termination)**:**	-126dBu
Signal-to-Noise Ratio (20Hz~20kHz)**:**	
0dBu input, minimum trim	> 90dB
-60dBu input, maximum trim	> 66dB
Limiter:	
attack time	2 ms
release time	500 ms
compression ratio	20:1
threshold adjust range	-10dBu ~ +18dBu
Tone Controls:	
Treble	±12dB @ 10kHz
Bass	±12dB @ 50Hz

High-Pass Filter:	12dB/oct. @ 125Hz
Input Impedance / Sensitivity:	
mic/line inputs	10kΩ / -71dBu ~ -11dBu
Tel (Channel 1)	600Ω / -71dBu ~ -11dBu
EQ In & Amp In	10kΩ / 0dBu (774mV)
Output Impedance / Level:	
Pre Out & Line Out	100Ω / 0dBu (774mV)
MOH	200Ω / +6dBu (1.5V)
Power Consumption:	
MXA35	< 75 watts
MXA75	< 100 watts
MXA150	< 150 watts
MXA300	< 300 watts
Dimensions (all models)**:**	
height (2 rack spaces)	3.47" (88 mm)
width	19" (483 mm)
depth	9.8" (249 mm)
Weight:	
MXA35	17.5 lbs. (7.9 kg)
MXA75	19 lbs. (8.6 kg)
MXA150	21 lbs. (9.1 kg)
MXA300	23 lbs. (10.5 kg)

BLOCK DIAGRAM



WARRANTY

BIAMP SYSTEMS IS PLEASED TO EXTEND THE FOLLOWING 5-YEAR LIMITED WARRANTY TO THE ORIGINAL PURCHASER OF THE PROFESSIONAL SOUND EQUIPMENT DESCRIBED IN THIS MANUAL

1. BIAMP Systems warrants to the original purchaser of new products that the product will be free from defects in material and workmanship for a period of 5 YEARS from the date of purchase from an authorized BIAMP Systems dealer, subject to the terms and conditions set forth below.

2. If you notify BIAMP during the warranty period that a BIAMP Systems product fails to comply with the warranty, BIAMP Systems will repair or replace, at BIAMP Systems' option, the nonconforming product. As a condition to receiving the benefits of this warranty, you must provide BIAMP Systems with documentation that establishes that you were the original purchaser of the products. Such evidence may consist of your sales receipt from an authorized BIAMP Systems dealer. Transportation and insurance charges to and from the BIAMP Systems factory for warranty service shall be your responsibility.

3. This warranty will be VOID if the serial number has been removed or defaced; or if the product has been altered, subjected to damage, abuse or rental usage, repaired by any person not authorized by BIAMP Systems to make repairs; or installed in any manner that does not comply with BIAMP Systems' recommendations.

4. Electro-mechanical fans, electrolytic capacitors, and normal wear and tear of items such as paint, knobs, handles, and covers are not covered under this warranty.

5. THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED. BIAMP SYSTEMS DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

6. The remedies set forth herein shall be the purchaser's sole and exclusive remedies with respect to any defective product.

7. No agent, employee, distributor or dealer of Biamp Systems is authorized to modify this warranty or to make additional warranties on behalf of Biamp Systems. statements, representations or warranties made by any dealer do not constitute warranties by Biamp Systems. Biamp Systems shall not be responsible or liable for any statement, representation or warranty made by any dealer or other person.

8. No action for breach of this warranty may be commenced more than one year after the expiration of this warranty.

9. BIAMP SYSTEMS SHALL NOT BE LIABLE FOR SPECIAL, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, INCLUDING LOST PROFITS OR LOSS OF USE ARISING OUT OF THE PURCHASE, SALE, OR USE OF THE PRODUCTS, EVEN IF BIAMP SYSTEMS WAS ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Biamp Systems
10074 S.W. Arctic Drive
Beaverton, Oregon 97005
(503) 641-7287

585.0188.90A

CE

DECLARATION OF CONFORMITY

We, The Manufacturer –
"UNISOUND PVT.LTD.
17, SDF-I, SEEPZ, Andheri (East), Mumbai – 400 096, India."

Declare that the products : **"Audio Amplifiers MXA35, MXA75, MXA150 & MXA300"**
are in conformity with the requirements of the Council directives
73/23/EEC & 89/336/EEC *

Following standards were referred while designing these models:
EN50081-1 : Generic Emission Standard.
EN50082-1 : Generic Immunity Standard.
EN60555-2 : Standard for Harmonic Emissions
EN60065 : Safety requirements for mains operated electronic & related apparatus for household & similar general use.

* Please note that the directive requires only what is called an adequate level of immunity / emmisions. It does not mean that the product will be totally unaffected in all possible situations.

Client
BIAMP SYSTEMS CORPORATION
10074 S.W. Arctic Drive
Beaverton, Oregon 97005, USA

Manufacturer: Unisound Pvt.Ltd.

Manufacturer's Authorised Signature :

Designation Of Signatory : Sr.Manager - Component & Reliability Engg.

Date : 3rd June 2004.

Client : Biamp Systems Corporation

Client's Authorised Signature :

Designation Of Signatory : Test and Compliance Engineer

Date: 7th June, 2004

SAFETY INFORMATION

The words WARNING and CAUTION throughout the manual, and on the device, call attention to important safety information. These words have the following meanings.

WARNING: The related information alerts you to conditions that could result in serious injury or damage to property if the instructions are not followed properly.

CAUTION: The related information instructs you on how to prevent damage to the equipment or how to avoid conditions that could result in minor injury if proper steps are not followed.

Product labelling and the operation manual may use the internationally recognized symbols defined below to note safety messages.

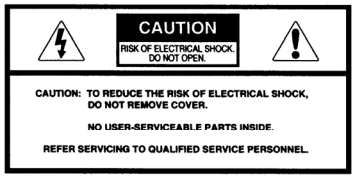
The lightning flash with arrowhead symbol, enclosed within a triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the apparatus's enclosure or at connection terminals that may be of sufficient magnitude to constitute a risk of electrical shock.

The exclamation point, enclosed within a triangle, is intended to alert the user to important installation, operation, and maintenance (servicing) instructions in the literature accompanying the apparatus.

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRICAL SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE.

CAUTION: Installation of this apparatus should be made by a qualified installation person and should conform to all applicable local codes.

Modification and optional equipment information referenced in this manual is for use by qualified installation and service personnel only.


CAUTION
RISK OF ELECTRICAL SHOCK. DO NOT OPEN.
CAUTION: TO REDUCE THE RISK OF ELECTRICAL SHOCK, DO NOT REMOVE COVER.
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

"INFORMACIÓN DE SEGURIDAD"

Las palabras **PELIGRO** (WARNING) y **PRECAUCIÓN** (CAUTION) a lo largo del manual y en el dispositivo (sistema), llaman la atención acerca de una importante información de seguridad. Estas palabras tienen los siguientes significados :

PELIGRO (WARNING) : la información relata las condiciones en que podría ser dañada seriamente la propiedad si no se siguen adecuadamente las instrucciones.

PRECAUCIÓN (CAUTION) : la información que se relata te instruye en cómo prevenir daños al equipo o como evitar condiciones que podrían resultar en perjuicio menor si los pasos adecuados no son seguidos correctamente.

El etiquetado del producto y el manual de operación pueden hacer uso de los símbolos reconocidos internacionalmente y cuyos mensajes estan definidos a continuación para modificar mensajes de seguridad:

El símbolo del rayo encerrado en un triángulo pretende alertar al usuario de la presencia de un peligroso voltaje no aislado ,dentro de la caja del aparato o a un terminal de conexión y que podría ser de suficiente magnitud como para constituir un grave riesgo de descarga eléctrica.

El punto de exclamación dentro de un triángulo pretende alertar al usuario de la importancia de las instrucciones de instalación, operación y mantenimiento (servicio) que acompañan al aparato.

PELIGRO (WARNING) : para reducir el riesgo de fuego o una descarga electrica, no exponer este aparato a la lluvia o la humedad.

PRECAUCIÓN (CAUTION) : la instalación de este aparato debería hacerse por una persona cualificada en la instalación, y debería conformar todos los códigos locales aplicables.

La modificación y la información opcional del equipo referenciada en este manual es para ser utilizada únicamente por personal cualificado en instalación y servicio.

PRECAUCIÓN
RIESGO DE DESCARGA ELÉCTRICA NO ABRIR.
PRECAUCIÓN: para reducir el riesgo de descarga eléctrica no levantar la tapa.
NO EXISTEN COMPONENTES DE SERVICIO EN EL INTERIOR.
REFERIRSE ÚNICAMENTE A PERSONAL CUALIFICADO PARA SERVICIO TECNICO.

INFORMATION CONCERNANT VOTRE SECURITE

Les mots **WARNING** et **CAUTION** dans le manuel d'utilisation et sur les appareils attirent votre attention sur les plus importantes informations concernant votre sécurité. Ces mots ont la signification suivante:

WARNING: Ce mot vous indique les circonstances dans lesquelles vous pourriez être blessé ou endommager votre équipement si les instructions ne sont pas suivies correctement.

CAUTION: Ce mot vous indique comment éviter d'endommager votre matériel et comment éviter de vous blesser si vous ne suivez pas les instructions.

Vous trouverez peut-être les symboles suivants sur votre appareil ou dans le manuel d'utilisation.

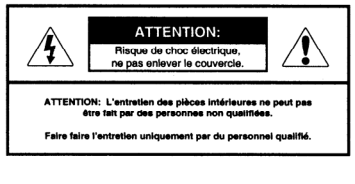
L'éclair se terminant en flèche dans un triangle permet de prévenir l'utilisateur d'un voltage dangereux non isolé dans l'appareil ou d'une connexion d'une amplitude suffisante pour constituer un risque de choc électrique.

Le point d'exclamation dans un triangle permet de prévenir l'utilisateur des points importants concernant l'installation, le fonctionnement et l'entretien de l'appareil figurant dans le manuel d'utulisation.

WARNING: POUR REDUIRE LES RISQUES DE FEU OU DE CHOC ELECTRIQUE, NE PAS METTRE L'APPAREIL SOUS LA PLUIE OU DANS L'HUMIDITE.

CAUTION: L'installation de cet appareil doit être faite par un installateur qualifié et doit être en conformité avec toutes les lois locales en application.

Les informations concernant une modification ou un équipement en option dans le manuel doivent être effectué par du personnel qualifié.


ATTENTION:
Risque de choc électrique, ne pas enlever le couvercle.
ATTENTION: L'entretien des pièces intérieures ne peut pas être fait par des personnes non qualifiées.
Faire faire l'entretien uniquement par du personnel qualifié.

INFORMAZIONI PER LA SICUREZZA

Le parole **AVVERTENZA** (WARNING) e **PRUDENZA** (CAUTION) poste sul manuale d'uso e sul apparato richiamano la vostra attenzione su delle importanti informazioni per la vostra sicurezza. Queste parole hanno il seguente significato.

AVVERTENZA: (WARNING) La suddetta indicazione vi avvisa sul rischio di incorrere in danni a cose o a persone ,se le procedure d'uso e installazione non saranno seguite propriamente.

PRUDENZA: (CAUTION) La suddetta indicazione vi instruisce su come prevenire e ridurre al minimo, il rischio di danni agli apparati e alle persone se le instruzioni saranno seguite propriamente.

Le apparecchiature e i manuali di instruzioni riporteranno la simbologia standard raffigurata qui sotto ,accompagnate dalle rolative informazioni per la sicurezza.

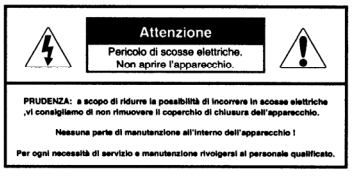
La simbologia con il fulmine all'interno di un triangolo, intende avvisare l'utente della presenza di alto volaggio all'interno del apparecchio in questione, e che il suddetto apparecchio si alimenta attraverso una tensione di rete ad alto voltaggio e che dunque si potrebbe incorrere sul rischio di una possibile scossa elettrica.

La simbologia con il punto esclamativo all'interno di un triangolo, intende avvisare l'utente di una serie di instruzioni contenute nel manuale d'uso riguardanti : operato,manutenzione e assistenza. Il suddetto manuale sarà a corredo dell'apparecchio.

AVVERTENZA: (WARNING) PER RIDURRE IL RISCHIO DI POSSIBILI INCENDI O SCOSSE ELECTTRICHE ,SCONSIGLIAMO DI ESPORRE L'APPARECCHIO ALLA PIOGGIA O ALL'UMIDITA'.

PRUDENZA: (CAUTION) l'Installazione di questo apparato dovrà essere effettuata solo da personale qualificato e il tipo di installazione dovrà essere in regola con le norme vigenti locali..

Modifiche e ulteriori informazioni specificate in questo manuale sono solamente riservate al personale qualificato all'installazione.


Attenzione
Pericolo di scosse elettriche. Non aprire l'apparecchio.
PRUDENZA: a scopo di ridurre la possibilità di incorrere in scosse elettriche ,vi consigliamo di non rimuovere il coperchio di chiusura dell'apparecchio.
Nessuna parte di manutenzione all'interno dell'apparecchio !
Per ogni necessità di servizio e manutenzione rivolgersi al personale qualificato.

Sicherheitshinweise

Die Bergriffe **WARNUNG** (engl. WARNING) und **ACHTUNG** (engl. CAUTION) in der Bedienungsanleitung und auf den Geräten machen auf wichtige Sicherheitsinformationen aufmerksam. Diese Begriffe haben die folgende Bedeutung:

WARNUNG: (WARNING) Der folgende Text warnt Sie vor ernsthaften Verletzungen oder Beschädigungen, die aus einer fehlerhaften Bedienung bzw. Handhabung des Gerätes resultieren können.

ACHTUNG: (CAUTION) Der folgende Text informiert Sie über Bedienungshinweise zum Schutz Ihres Gerätes oder weist auf mögliche Schäden hin, wenn die Bedienungshinweise nicht beachtet werden.

Die Beschriftung der Geräte und die Bedienungsanleitungen weisen unter Umständen international bekannte Symbole auf, die die folgende Bedeutung haben:

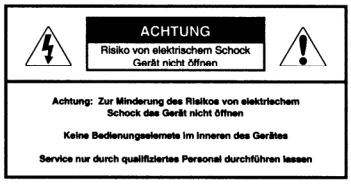
Das Blitzsymbol im Dreieck warnt vor anliegender, nicht isolierter „gefährlicher Spannung" im Inneren oder an den Anschlüssen des Gerätes. Die Berührung der unter Spannung stehenden Teile kann zu einem elektrischen Schock führen.

Das Rufzeichen im Dreieck macht auf wichtige Installations-, Bedienungs- und Servicehinweise in der zugehörigen Bedienungsanleitung aufmerksam.

WARNUNG: (WARNING) Zur Minderung des Risikos von Feuer und elektrischem Schock schützen Sie das Gerät vor Regen und Feuchtigkeit.

ACHTUNG: (CAUTION) Die Installation des Gerätes sollte nur durch qualifiziertes Personal durchgeführt werden und muß den jeweiligen Bestimmungen entsprechen.

Die Modifikationen und die Informationen zu den optionalen Erweiterungen in der Bedienungsanleitung sind nur für qualifiziertes Personal bestimmt.


ACHTUNG
Risiko von elektrischem Schock
Gerät nicht öffnen
Achtung: Zur Minderung des Risikos von elektrischem Schock das Gerät nicht öffnen
Keine Bedienungselemete im Inneren des Gerätes
Service nur durch qualifiziertes Personal durchführen lassen

Sikkerhedsinformation

Ordene ***ADVARSEL*** (WARNING) og ***FORSIGTIG*** (CAUTION), brugt i henholdsvis brugervejledning og på selve produktet, indikerer, at vigtig information omkring sikkerhed følger. Ordene betyder følgende:

ADVARSEL: (WARNING) Den efterfølgende information advarer Dem om forhold, der kan føre til alvorlige ulykker og ejendomsskader, hvis ikke vejledningen følges.

FORSIGTIG: (CAUTION) Den efterfølgende information vejleder Dem i, hvordan De undgår skade på produktet, samt undgår forhold der kan føre til mindre ulykker og ejendomsskader, hvis ikke vejledningen følges.

Produktetiketter og brugervejledning kan indeholde de internationalt anerkendte symboler der er vist nedenfor:

Trekanten med et lyn i midten har til hensigt at advare brugeren om, at produktet indeholder "farlig spænding", og at det derfor er forbundet med fare for elektrisk stød at åbne produktet.

Trekanten med udråbstegn har til hensigt at advare brugeren om, at vigtig information omkring installation, brug, service og vedligeholdelse af produktet er indeholdt i den medfølgende brugervejledning.

ADVARSEL: (WARNING) Med henblik på at reducere risikoen for brand eller elektrisk stød, må produktet ikke udsættes for regn eller fugt.

FORSIGTIG: (CAUTION) Installation af dette produkt skal foretages af en autoriseret installatør og skal være i overensstemmelse med alle anvendelige lokale retningslinier.

Modifikationer samt alternativt udstyr beskrevet i denne brugervejledning er kun henvendt til kvalificerede installatører og servicepersonale.

FORSIGTIG
Fare for elektrisk stød
- må ikke åbnes.
FORSIGTIG: Med henblik på at reducere risikoen for elektrisk stød, må svøbet ikke fjernes.
Indeholder ingen komponenter relevante for brugeren.
Anvend autoriseret servicepersonale ved alle servicetiltag.

VEILIGHEIDSINFORMATIE

De woorden **WAARSCHUWING** (WARNING) en **VOORZICHTIG** (CAUTION) welke in de handleiding en op het apparaat voorkomen, waarschuwen U voor belangrijke veiligheidsinformatie. Zij hebben de volgende betekenis:

WAARSCHUWING: (WARNING) De betreffende informatie waarschuwt U voor omstandigheden die kunnen leiden tot defecten of beschadigingen aan apparaten als de instructies niet volledig worden opgevolgd.

VOORZICHTIG: (CAUTION) De betreffende informatie instrueert U hoe U defecten aan apparatuur kunt voorkomen of hoe U omstandigheden kunt vermijden die kunnen resulteren in schade als de juiste stappen niet worden opgevolgd.

Produkt informatie en handleiding hanteren onderstaande internationaal erkende symbolen om veiligheidsinstructies aan te geven.

De bliksemschicht in een driehoek wordt gebruikt om de gebruiker te attenderen op ongeïsoleerde "gevaarlijke spanning" in het apparaat of bij de aansluitklemmen, die het risico van een electrische schok kunnen geven.

Het uitroepteken in een driehoek wordt gebruikt om de gebruiker te attenderen op belangrijke installatie, gebruiks- en onderhoudsinstructies in de beschrijving die bij het apparaat hoort.

WAARSCHUWING: (WARNING) OM HET RISICO VAN BRAND OF EEN ELECTRISCHE SCHOK TE VERMIJDEN DIENT U HET APPARAAT NIET AAN VOCHT BLOOT TE STELLEN.

VOORZICHTIG: (CAUTION) Installatie van dit apparaat dient te geschieden door gekwalificeerd personeel en dient te geschieden conform de plaatselijke voorschriften.

Modificaties en aanvullende informatie waar in de handleiding naar wordt verwezen, dient alleen voor gebruik door gekwalificeerd personeel.

VOORZICHTIG.
Risico van electrische schok.
Niet openen.
Waarschuwing: Om het risico van een electrische schok te verminderen het apparaat niet openen.
Er zijn geen, door gebruiker, vervangbare onderdelen in dit apparaat.
Service overlaten aan gekwalificeerd service personeel.

TURVALLISUUSTIEDOTE

Sanat **VAROITUS** (WARNING) ja **HUOMIO** (CAUTION), jotka esiintyvät manuaalissa ja itse laitteessa, ilmoittavat tärkeästä turvallisuusinformaatiosta. Näillä sanoilla on seuraava merkitys:

VAROITUS: (WARNING) Yhteydessä oleva informaatio varoittaa olosuhteista, jotka saattavat johtaa vakaviin vammoihin tai laitteen vaurioitumiseen, mikäli ohjeita ei täysin noudateta.

HUOMIO: (CAUTION) Yhteydessä oleva informaatio neuvoo, miten laitteen vaurioituminen voidaan ehkäistä tai miten voidaan välttää olosuhteet, jotka voivat johtaa lieviin vammoihin, mikäli ohjeita ei noudateta.

Tuotteessa tai käyttöohjeessa voidaan käyttää seuraavia alla määriteltyjä kansainvälisiä symboleja, jotka viittaavat turvallisuusinformaatioon.

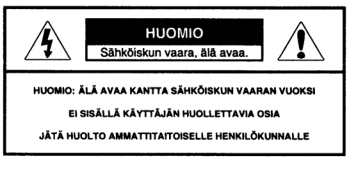
Kolmion sisällä olevan nuolipäinen salama varoittaa käyttäjää laitteen sisällä tai liitännöissä olevasta eristämättömästä vaarallisesta jännitteestä, joka saattaa olla tarpeeksi suuri aiheuttaakseen sähköiskun vaaran.

Kolmion sisällä oleva huutomerkin tarkoituksena on ilmoittaa käyttäjälle tärkeistä asennusta, käyttöä tai huoltoa koskevista ohjeista laitteen mukana seuraavassa kirjallisuudessa.

VAROITUS: (WARNING) ÄLÄ ALTISTA LAITETTA SATEELLE TAI KOSTEUDELLE TULIPALON JA SÄHKÖISKUN VAARAN VUOKSI.

HUOMIO: (CAUTION) Laitteen asentaminen tulisi jättää ammattitaitoisen henkilön suoritettavaksi ja asennuksessa tulee noudattaa kaikkia paikallisia säännöksiä.

Tässä manuaalissa oleva informaatio, joka koskee muutostöitä ja lisälaitteita, on tarkoitettu vain ammattitaitoisten asennus- ja huoltohenkilöiden käyttöön.


HUOMIO
Sähköiskun vaara, älä avaa.
HUOMIO: ÄLÄ AVAA KANTTA SÄHKÖISKUN VAARAN VUOKSI
EI SISÄLLÄ KÄYTTÄJÄN HUOLLETTAVIA OSIA
JÄTÄ HUOLTO AMMATTITAITOISELLE HENKILÖKUNNALLE

SIKKERHETS INFORMASJON

Når ordene **ADVARSEL** (WARNING) og **VIKTIG** (CAUTION) blir brukt i manualen og på produktet, gjelder det informasjon som har med brukerens sikkerhet å gjøre. Ordene har følgende mening:

ADVARSEL: (WARNING) Tilhørende informasjon viser til forhold som kan resultere i alvorlige skader eller ødeleggelser hvis anvisningene ikke følges nøye.

VIKTIG: (CAUTION) Tilhørende informasjon forteller deg hvordan du skal unngå feil på utstyret, eller unngå situasjoner som kan resultere i mindre skader.

Produkt merkingen og bruksanvisningen bruker internasjonale symboler for å merke punkter som er viktige for brukerens sikkerhet.

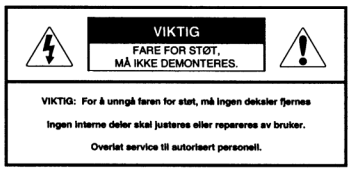
Lynet i en triangel advarer brukeren om uisolert "farlig spenning" inne i apparatet, eller tilkoblings terminaler som kan gi støt.

Etter utropstegnet i en triangel følger informasjon som er viktig når det gjelder installasjon, bruk og vedlikehold (service) av apparatet.

ADVARSEL: (WARNING) FOR Å REDUSERE FAREN FOR BRANN ELLER STØT MÅ APPARATET IKKE UTSETTES FOR VANN ELLER FUKTIGHET.

VIKTIG: (CAUTION) Installasjon av apparatet skal foretas av autorisert installatør etter gjeldende forskrifter.

Modifikasjoner og tilleggs informasjon som følger er kun for kvalifiserte installatører eller service personell.


VIKTIG
FARE FOR STØT,
MÅ IKKE DEMONTERES.
VIKTIG: For å unngå faren for støt, må ingen deksler fjernes
Ingen interne deler skal justeres eller repareres av bruker.
Overlat service til autorisert personell.

SÄKERHETS INFORMATION

Orden **VARNING** (WARNING) och **OBSERVERA** (CAUTION) vilka används i denna manual och på apparaten, är menade att uppmärksamma viktig säkerhets information. Dessa ord har följande betydelse.

VARNING: (WARNING) Information som uppmärksammar på omständigheter som kan resultera i allvarlig personskada eller skada på egendom om instruktionerna ej följs.

OBSERVERA: (CAUTION) Information som uppmärksammar på instruktioner om hur skada på utrustning eller hur situationer där lättare personskador kan uppstå undvikes.

Följande internationellt använda ord och symboler används i handboken och på märkningar på produkten för att uppmärksamma användare på viktiga säkerhets instruktioner.

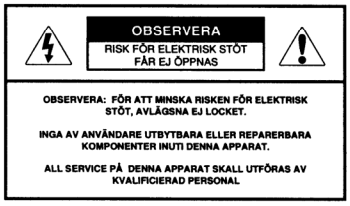
En blixt med pil, innesluten i en triangel, menad att uppmärksamma användare på närvaron av oisolerade "farliga spänningar" i apparaten eller på anslutnings kontakter vilka har tillräcklig styrka för att medföra risk för elektrisk söt.

Ett utropstecken, innesluten i en triangel, menad att uppmärksamma användare på viktiga installations, handhavande eller underhålls-instruktioner i medföljande dokumentation.

VARNING: (WARNING) FÖR ATT MINSKA RISKEN FÖR BRAND ELLER ELEKTRISK STÖT, UTSÄTT EJ APPARATEN FÖR FUKT ELLER VÄTSKA.

OBSERVERA: (CAUTION) Installation av denna apparat skall utföras av kvalificerad installatör samt enligt alla gällande lokala bestämmelser.

Eventuella modifierings instruktioner och annan information av teknisk art i denna manual är endast avsedd att användas av kvalificierad installations och service personal.


OBSERVERA
RISK FÖR ELEKTRISK STÖT
FÅR EJ ÖPPNAS
OBSERVERA: FÖR ATT MINSKA RISKEN FÖR ELEKTRISK STÖT, AVLÄGSNA EJ LOCKET.
INGA AV ANVÄNDARE UTBYTBARA ELLER REPARERBARA KOMPONENTER INUTI DENNA APPARAT.
ALL SERVICE PÅ DENNA APPARAT SKALL UTFÖRAS AV KVALIFICIERAD PERSONAL

ΠΛΗΡΟΦΟΡΙΕΣ ΑΣΦΑΛΕΙΑΣ

Οι λέξεις **ΚΙΝΔΥΝΟΣ** (WARNING) και **ΠΡΟΣΟΧΗ** (CAUTION) που αναφέρονται μέσα στο εγχειρίδιο και στη συσκευή, επικεντρώνουν την προσοχή σε σημαντικές πληροφορίες ασφαλείας. Οι λέξεις αυτές έχουν την παρακάτω σημασία.

ΚΙΝΔΥΝΟΣ : (WARNING) Η αναγραφόμενη πληροφορία επιστά την προσοχή σας σε καταστάσεις που θα μπορούσαν να έχουν σαν αποτέλεσμα σοβαρό τραυματισμό ή καταστροφή της ιδιοκτησίας αν οι οδηγίες δεν ακολουθηθούν κατάλληλα.

ΠΡΟΣΟΧΗ : (CAUTION) Η αναγραφόμενη πληροφορία σας καθοδηγεί πώς να προλάβετε καταστροφή του εξοπλισμού ή πώς να αποφύγετε καταστάσεις που θα μπορούσαν να έχουν ως αποτέλεσμα μικροτραυματισμούς αν δεν ακολουθηθούν τα σωστά βήματα.

Στις επιγραφές των προτόντων και στο εγχειρίδιο λειτουργίας, χρησιμοποιούνται τα σιεθνώς αναγνωρισμένα σύμβολα, των οποίων ο ορισμός δίνεται παρακάτω έτσι ώστε να υπογραμμιστούν τα μηνύματα ασφαλείας.

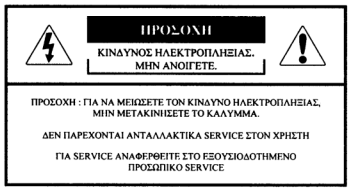
Η φωτενή αναλαμπή με σύμβολο το βέλος, μέσα στο τρίγωνο, έχει σκοπό να επιστήσει την προσοχή του χρήστη, στην ύπαρξη μη- μονωμένης « επικίνδυνης ισχύος ρεύματος » στο εσωτερικό της συσκευής ή στις άκρες σύνδεσης οι οποίες μπορεί να έχουν αρκετό μέγεθος ώστε να περιέχουν κίνδυνο ηλεκτροπληξίας.

Το επεξηγηματικό σημείο, μέσα στο τρίγωνο, έχει σκοπό να επιστήσει την προσοχή του χρήστη στις σημαντικές οδηγίες εγκατάστασης, λειτουργιας και συντήρησης (service) που περιέχονται στα φυλλάδια που συνοδεύουν την συακευή.

ΚΙΝΔΥΝΟΣ : (WARNING) Για να αποφύγετε τον κίνδυνο φωτιάς ή ηλεκτροπληξίας, μην εκθέτετε αυτή τη αυσκευή σε βροχή ή σε υγρασία.

ΠΡΟΣΟΧΗ : (CAUTION) Η εγκατάσταση αυτής της συσκευής θα πρέπει να γίνει από εξειδικευμένο άτομο και θα πρέπει να προσαρμόζεται σε όλους τους εφαρμόσιμους τοπικούς κώδικες.

Οι τροποποιήσεις και οι προϋποθετικές πληροφορίες για τον εξοπλισμό, που αναφέρονται σε αυτό το εγχειρίδιο, προορίζονται για χρήση μόνο από εξειδικευμένα στην εγκατάσταση και στο service, άτομα.



INFORMAÇÃO SOBRE SEGURANÇA

As palavras ADVERTÊNCIA (WARNING) e PRECAUÇÃO (CAUTION) neste manual, e no dispositivo, alertam para importantes informações sobre segurança. Estas palavras significam o seguinte:

ADVERTÊNCIA : (WARNING) Informação relacionada que alerta sobre condições que poderão resultar em lesões sérias ou prejuízo, se as instruções não forem seguidas adequadamente.

PRECAUÇÃO : (CAUTION) Informação relacionada que instrúi como prevenir danos no equipamento ou como evitar condições que poderão resultar em lesões leves, se os passos não forem seguidos adequadamente.

As etiquetas do produto e do manual de operações podem usar os símbolos internacionalmente reconhecidos definidos abaixo para advertir mensagens de segurança.

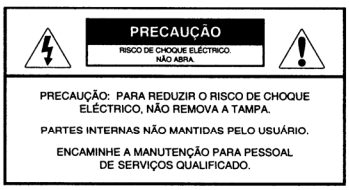
símbolo do relâmpago com uma seta, dentro de um triângulo, tem o fim de alertar o usuário a presença de "voltagem perigosa" sem isolação dentro da caixa isolamento do aparelho ou nos terminais de ligação que podem ter a magnitude suficiente que constitui um risco de choque eléctrico.

ponto de exclamação, dentro de um triângulo, tem o fim de alertar o usuário sobre instruções importantes de instalação, operação e manutenção (serviços) na literatura que acompanha o aparelho.

ADVERTÊNCIA : (WARNING) PARA REDUZIR O RISCO DE INCÊNDIO OU CHOQUE ELÉCTRICO, NÃO EXPONHA ESTE APARELHO A CHUVA OU HUMIDADE.

PRECAUÇÃO : (CAUTION) A instalação deste aparelho deve ser feita por um profissional qualificado e deve obedecer a todos os códigos locais aplicáveis.

Modificação e informação sobre equipamento adicional citados neste manual são para o uso exclusivo do pessoal qualificado de instalação e manutenção.


PRECAUÇÃO
RISCO DE CHOQUE ELÉCTRICO.
NÃO ABRA.
PRECAUÇÃO: PARA REDUZIR O RISCO DE CHOQUE ELÉCTRICO, NÃO REMOVA A TAMPA.
PARTES INTERNAS NÃO MANTIDAS PELO USUÁRIO.
ENCAMINHE A MANUTENÇÃO PARA PESSOAL DE SERVIÇOS QUALIFICADO.

(This information is presented to comply with the requirements of Chinese law SJ/T11363-2006)

有害物质表

Biamp 系统
MXA35、MXA75、MXA150 和 MXA300
扩音器

部件名称	有毒有害物质或元素					
	Pb（铅）	Hg（汞）	Cd（镉）	Cr+6（六价铬）	PBB	PBDE
MXA35、MXA75、MXA150 或 MXA300 扩音器设备	X	O	X	O	O	O
安装硬件	O	O	O	O	O	O
安全盖	O	O	O	O	O	O
电源线	O	O	O	O	O	O
可插拔 Euroblock 连接器	O	O	O	O	O	O
手册和其他书面文档	O	O	O	O	O	O
包装箱和所有包装材料	O	O	O	O	O	O

0：表示该部件所有均质材料中的这种有毒有害物质低于 SJ/T11363-2006 的限制要求

X：表示该部件中至少有一种均质材料所含的这种有毒有害物质高于 SJ/T11363-2006 的限制要求。

在电触头和（或）镀镉所含的均质材料中，镉及其化合物的含量可以超过 0.01%，但欧盟指令 91/338/EEC（根据欧盟指令 76/769/EEC）限制销售和使用某些危险物质和制剂部分中所禁止的用途除外。

在以下一种或多种物质所含的均质材料中，铅及其化合物的含量可以超过 0.1%：
1) 电子元器件中玻璃内所含的铅
2) 铅在钢材中是作为一种合金元素，含量可达 0.35%。
3) 铅在铝材中是作为一种合金元素，含量可达 0.4%。
4) 铅在铜材中是作为一种合金元素，含量可达 4%。
5) 高熔点类焊料中的铅（即铅料合金，铅含量超过 85%）。
6) 电子陶瓷部件内的铅。
7) 由两种以上元素组成的焊料中所含的铅，用于连接针脚和微处理器包装，其中铅的含量超过 80% 但低于 85%。
8) 顺应针连接系统内的铅。
9) 倒装芯片封装中半导体芯片及载体之间形成可靠连接所用焊料中的铅。

在正常使用情况下，中国环保使用期限为 10 年，条件是：

- 环境温度为 0-40C（32-104°F）
- 湿度为 0-95%，无凝结
- 海拔高度为 0-10,000 英尺
- 气流不受阻碍
- 没有水或其他液体进入任何部件
- 电源为 95-265V AC，50/60Hz
- 部件没有损坏（损坏部件应立即修理）
- 由工厂授权人员使用批准的材料进行所有维修

EU RoHS COMPLIANT

This Biamp product -- including all attendant cables and accessories supplied by Biamp -- meets all requirements of EU Directives 2002/95/EC of January 27, 2003, and 2005/618/EC of August 18, 2005, the EU RoHS Directives.An EU RoHS Materials Content Declaration document may be obtained at http://www.biamp.com